REMARKS

I. INTRODUCTION

Claims 1-21 are pending in the present application. In view of the following remarks, it is respectfully submitted that all of the above-identified claims are allowable.

II. THE U.S.C. §103(a) REJECTIONS SHOULD BE WITHDRAWN

Claims 1-21 stand rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Application Publication No. 2004/0013128 to Moreton et al. (hereinafter "Moreton"), in view of U.S. Patent Application Publication No. 2003/0048770 to Proctor (hereinafter "Proctor"), and in further view of U.S. Patent No. 6, 853,348 to Jung et al. (hereinafter "Jung"). *06/06/05 Office Action*, pages 2-6.

Moreton discloses a Wireless Local Area Network ("WLAN") access point ("AP") and a method to control the AP to allow multiple clients that utilize different wireless standards to transmit and receive data. *Moreton*, Abstract. Moreton teaches an AP and a method where two different wireless standards can be supported simultaneously, giving the appearance of there being only one network. *Moreton*, ¶ [0015]. Although Moreton discloses an access point and a method that utilizes two different frequency bands in implementing a WLAN, Moreton still requires the channel to be reserved prior to transmission. "[A]ccess to channel is controlled using a mechanism called carrier sense multiple access with collision avoidance (CSMA/CA)." *Moreton*, ¶ [0072]. This mechanism incorporates a request to send ("RTS") and clear to send ("CTS") frames in trying to avoid collisions ("RTS/CTS"). Moreton builds on the RTS/CTS

procedure by adding data to the RTS and CTS frames that inform the receiving station, transmitting station, and other stations on the network, the time period during which the channel has been reserved so that other clients on the network would not attempt to transmit data. *Moreton*, ¶ [0084]. Although Moreton may introduce a modified RTS/CTS scheme, the channel must still be reserved before any data is transmitted over the network.

This requirement of reserving the channel prior to transmission with RTS/CTS broadcasts is exactly the type of preliminary broadcasts that the present invention eliminates. Independent claim 1 recites, "transmitting payload data exclusively on the first band *without having to reserve the first band prior to transmission.*" (Emphasis added). As further described in the Specification, "there is no need for the AP 10 to use a system such as an RTS/CTS mechanism to reserve exclusive use of such a channel." *Specification*, ¶ [0018]. "The present invention greatly reduces the overhead of wireless networks by making preparatory transmissions (e.g., RTS/CTS broadcasts) unnecessary." *Specification*, ¶ [0026]. Instead of utilizing a preliminary broadcast reservation procedure such as RTS/CTS, the present invention dedicates a high-frequency band for uni-directional downstream broadcasts from the AP to the clients, making a reservation mechanism unnecessary. *Specification*, ¶ [0017]. This type of transmission would not be possible by the method disclosed in Moreton since it relies on reserving the channel to prevent packet collisions by ensuring that clients will not attempt to transmit data while another client is in the process of transmitting.

Neither Proctor nor Jung cure this deficiency of Moreton. Proctor discloses a technique for using directional antennas in wireless data transmission systems. *Proctor*, Abstract. The purpose of Proctor is to utilize a directional antenna array to improve the signal

integrity to those clients in the network. *Proctor*, ¶ [0007]. Although Proctor is dealing with wireless networks, it embraces the RTS/CTS mechanism. (See *Proctor*, ¶¶ [0014]-[0018]). Thus, the method in Proctor does not eliminate the need for preliminary broadcasts used to reserve a channel, such as the RTS/CTS mechanism, but incorporates such a mechanism into its design.

Jung discloses the design of a dual band linear antenna array. *Jung*, Abstract. There is no mention in Jung regarding any wireless network or WLAN. Jung merely deals with the hardware design of a specific antenna array.

Accordingly, neither Moreton, Proctor, nor Jung, alone or in combination, suggests or teaches a method that comprises "transmitting payload data exclusively on the first band without having to reserve the first band prior to transmission" as recited in independent claim 1. Thus, it is respectfully submitted that the 35 U.S.C. 103(a) rejection of claim 1, and the claims depending therefrom (claims 2-8) should be withdrawn.

Similar to claim 1, claim 9 recites a method comprising "the first device transmitting the payload data without having to reserve the first band." Therefore, for at least the reasons discussed with respect to claim 1, it is respectfully submitted that the 35 U.S.C. 103(a) rejection of claim 9, and the claims depending therefrom (claims 10-15) should be withdrawn.

Similar to claim 1, claim 16 recites a device comprising "wherein payload data is uni-directionally transmitted using the smart antenna on the first band without having to reserve the first band prior to the transmission of the payload data." Therefore, for at least the reasons discussed with respect to claim 1, it is respectfully submitted that the 35 U.S.C. 103(a) rejection of claim 16, and the claims depending therefrom (claims 17-21) should be withdrawn.

CONCLUSION

In view of the remarks submitted above, Applicant respectfully submits that the present case is in condition for allowance. All issues raised by the Examiner have been addressed, and a favorable action on the merits is thus earnestly requested.

Respectfully submitted,

Dated: September 6, 2005

By: _____
Oleg F. Kaplun (Reg. No. 45,559)

Fay Kaplun & Marcin, LLP
150 Broadway, Suite 702
New York, NY 10038
(212) 619-6000 (phone)
(212) 619-0276 (facsimile)